

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

KILGER et al.

Atty. Docket No. 101614-00021

Serial No.: To Be Assigned

Examiner:

Filed: Herewith

Art Unit:

For: METHOD FOR THE DIRECT, EXPONENTIAL AMPLIFICATION AND
SEQUENCING OF DNA MOLECULES AND ITS APPLICATION

INFORMATION DISCLOSURE STATEMENT

Director of the U.S. PTO
P.O. Box 1450
Alexandria, VA 22313-1450

Date: April 15, 2004

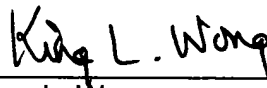
Sir:

Pursuant to 37 CFR §1.56, the attention of the Patent and Trademark Office is hereby directed to the information item(s) listed on the attached PTO-1449. Unless otherwise indicated herein, one copy of each item(s) is attached. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the item(s) be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

- ☒ 1. This Information Disclosure Statement is being filed (a) within three months of the U.S. filing date, OR (b) before the mailing date of a first Office Action on the merits in the present application, OR (c) accompanies a Request for Continued Examination. No certification or fee is required.
- ☐ 2. This Information Disclosure Statement is being filed more than three months after the U.S. filing date AND after the mailing date of the first Office Action on the merits, but before the mailing date of a Final Rejection or Notice of Allowance.
- ☐ a. I hereby certify that each item of information contained in this Information Disclosure Statement was first cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement. 37 CFR §1.97(e)(1).
- ☐ b. I hereby certify that no item of information in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 CFR §1.56(c) more than three months prior to the filing of this Information Disclosure Statement. 37 CFR §1.97(e)(2).

- ☐ c. A check in the amount of \$180.00 in payment of the fee under 37 CFR §1.17(p). Please charge any fee deficiency or credit any overpayment to Deposit Account No. 01-2300 as needed to ensure consideration of the disclosed information.
- ☐ 3. This Information Disclosure Statement is being filed more than three months after the U.S. filing date and after the mailing date of a Final Rejection or Notice of Allowance, but before payment of the Issue Fee. Applicant(s) hereby petition(s) that the Information Disclosure Statement be considered. Attached is our check in the amount of \$180.00 in payment of the petition fee under 37 CFR §1.17(i)(1). Please charge any fee deficiency or credit any overpayment to Deposit Account No. 01-2300 as needed to ensure consideration of the disclosed information.
- ☐ a. I hereby certify that each item of information contained in this Information Disclosure Statement was first cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement. 37 CFR §1.97(e)(1).
- ☐ b. I hereby certify that no item of information in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 CFR §1.56(c) more than three months prior to the filing of this Information Disclosure Statement. 37 CFR §1.97(e)(2).
- ☒ 4. The references were cited by or submitted to the Office in parent application No. 09/956,342 filed September 20, 2001, which in turn is a continuation Application of Parent Application No. 09/311,723 filed May 14, 1999, which in turn is a continuation Application of Parent Application No. 08/991,347, filed December 16, 1997, which is relied upon for an earlier filing date under 35 U.S.C. § 120. Thus, copies of these references are not attached. 37 CFR § 1.98(d).

Respectfully submitted,



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FORM PTO-1449	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. 101614-00021	SERIAL NO. To Be Assigned
LIST OF REFERENCES CITED BY APPLICANT (Use several sheets if necessary)		APPLICANT KILGER et al	
		FILING DATE Herewith	GROUP 1634

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		OCUMENT NO.	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
	1	4,683,202	08/28/1987	MULLIS			
	2	4,962,020	10/09/1990	TABOR et al.			
	3	5,075,216	12/24/1991	INNIS et al.			
	4	5,338,671	08/16/1994	SCALICE et al.			
	5	5,409,811	04/25/1995	TABOR et al.			
	6	5,427,911	06/27/1995	RUANO			
	7	5,512,462	04/30/1996	CHENG			
	8	5,556,772	09/17/1996	SORGE et al.			
	9	5,587,287	12/24/1996	SCALICE et al.			
	10	5,693,517	12/02/1997	GELFAND et al.			
	11	5,614,365	03/25/1997	TABOR et al.			
	12	5,789,168	08/04/1998	LEUSHNER et al.			
	13	5,830,657	11/03/1998	LEUSHNER et al.			
	14	5,432,065	07/11/95	FULLER			
	15	5,928,906	07/27/99	Köster et al.			
	16	6,107,032	Aug. 2000	Kilger et al.	435	6	

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		OCUMENT NO.	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION YES NO PART.		
	17	0 727 496	08/21/1996	EP					
	18	0 771 870	05/07/1997	EP					

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

	19	Amersham User Manual, US 78500, pp. 1-41, 1995
	20	Amersham Catalog, p. 368, 1996
	21	Chemical Abstracts, vol. 125, no. 25, p. 393, 125:319052, 1996
	22	Deng et al., "Simultaneous Amplification and Sequencing of Genomic DNA (SAS)....", JOURNAL OF MICROBIOLOGICAL METHODS, vol. 17, pp. 103-113, 1993
	23	Hwang et al., "Direct Automated Sequencing of Single Lambda-Phage Plaques by Exponential

	24	International Publication No. WO 93/02212, published Feb. 4, 1993
	25	International Publication No. WO 94/26766, published Nov. 24, 1994
	26	International Publication No. WO 96/10640, published Apr. 11, 1996
	27	International Publication No. WO 96/41014, published Dec. 19, 1996
	28	International Publication No. WO 97/23650, published Jul. 3, 1997
	29	International Publication No. WO 97/40939, published Nov. 6, 1997
	30	International Publication No. WO 97/41257, published Nov. 6, 1997
	31	International Publication No. WO 97/41258, published Nov. 6, 1997
	32	International Publication No. WO 97/41259, published Nov. 6, 1997
	33	International Publication No. WO 97/42348, published Nov. 13, 1997
	34	Kilger et al., "Direct Exponential Amplification and Sequencing (DEXAS) of Genomic DNA", BIOL. CHEM., vol. 378, pp. 99-105, Feb. 1997
	35	Kilger et al., "Direct DNA Sequence Determination from Total Genomic DNA", NUCLEIC ACIDS RESEARCH, vol. 25, no. 10, pp. 2032-34, May 1997
	36	Rao, "Direct Sequencing of Polymerase Chain Reaction-Amplified DNA", ANALYTICAL BIOCHEMISTRY, vol. 216, pp. 1-14, 1994
	37	Sarkar et al., "Semi Exponential Cycle Sequencing", NUCLEIC ACIDS RESEARCH, vol. 23, no. 7, pp 1269-1270, 1995
	38	Tabor et al, PROC. NATL ACAD. SCI, U.S.A., "A Single Residue in DNA Polymerases of the Escherichia Coli DNA Polymerase 1 Family Is Critical for Distinguishing Between Deoxy-And Dideoxynucleotides", vol. 92, pp. 6339-6343, July 1995

EXAMINER	DATE CONSIDERED
<p>*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.</p>	